1. COURSE DETAILS:

Course Code : APIQ-002
Course Title : API 570 Piping Inspector Certification Preparatory
Course Duration : 6 Days

2. COURSE OVERVIEW

- Progressive corrosion deteriorates pressure retaining walls to such an extent that there is always a threat of major break down which may lead to fire or some time to explosion
- To avoid such accidents API has developed systematic ways to carry out 'In-service Inspection' to determine rate of corrosion and the remaining life of the equipment and piping
- The API initiated the Piping Inspector certification program to provide a continued high level of safety using Inspectors specialized in process piping. The program promotes self-regulation, establishing a uniform standard that will assist national, regional and local governments in setting Process Piping regulations

3. LEARNING OUTCOMES:

- This course will prepare an Inspector to successfully complete the API 570 Authorized Piping Inspector Certification Examination by thoroughly reviewing the API 570 Standard, APT CERT 571, API CERT 574, API CERT 577, API CERT 578 the ASME Boiler and Pressure Vessel Code Sections V and IX, and the ASME Code for Pressure Piping B16.5 and B31.3.
- Mock examination questions, meeting the appropriate specific examination criteria, will be utilized to simulate actual API test conditions, providing an effective study base.
- Participants will be presented with a detailed course book and will become thoroughly acquainted with the elements, aspects and requirements of API 570 – Piping Inspection.
- This course will help to improve management control of process unit inspection, repair, alteration and re-rating of In-Service Piping Systems and to reduce the potential for inspection delays resulting from meeting regulatory requirements.

4. CONTENTS:

Day 1:

Session 1

- Introduction to API 570
- Certification examination information
- Body of Knowledge — API 570
- Introduction to Piping Code, B 31.3

Session 2

- Impact testing requirements
- Design of piping components — ASME B 31.3
- Thickness calculations for pipes and blanks

Session 3

- Pressure tests
- Hydrostatic
- Pneumatic
- Pre-heating and PWHT requirements for piping
- Daily Quiz

Day 2

Session 1

- Points to recall
- Review of Quiz
- Selection of flanges Pr-temp. ratings & Pressure testing of flanges
- Evaluation of flanged fittings

Session 2

- Material for pipes and fittings
- Common ASTM specifications
- Introduction to API 570
- API 570 Scope, applicability & limitations

- QA Manual. Organization and responsibilities

Session 3

- Authorized inspection agency
- Repair organization
- Inspection practices; RBI inspection
- Daily Quiz

Day 3

Session 1

- Points to recall, Review of Quiz
- Deteriorating of piping components
- CUI, SCC, creep and fatigue failures
- Inspection methods

Session 2

- Determining inspection frequencies
- Extent of inspection
- Corrosion under insulation
- Inspection Data Evaluation

Session 3

- Evaluation of thinned areas
- Evaluation of pitted areas
- Determining safe MAWP
- Daily Quiz

Day 4

Session 1

- Points to recall, Review of Quiz
- Repairs, alterations, re-rating of piping systems
- Repair and alteration procedures

Session 2

- Inspection Of Buried piping
- Corrosivity tests
- Cathodic protection of buried piping

Session 3

- Leak testing of piping
- Retirement thickness
- Inspection records
- Daily Quiz

Day 5

Session 1

- Points to recall, Review of Quiz
- API 574 — Piping components
- Inspection practices
- Selection of TMLs
- Retirement thickness calculation for valves and flanged fittings

Session 2

- ASME Section IX Requirements
- Welding qualifications
- WPS/PQR tests and documentation
- Performance qualifications

Session 3

- Review of WPS/PQR documents
- Additional WPS/PQR requirements as per ASME B 31.3 and API 570
- Welding Inspection requirements as per B 31.3
- Daily Quiz

Day 6

Session 1

- Points to recall, Review of Quiz
- ASME Section V Requirements
- Non-destructive testing procedures
- Procedural requirements for RT, PT, MT, UT

Session 2

- NDT procedures
- visual testing
- bubble test
- Final Simulated Exam (Open book)

Session 3

- Final Simulated Exam (Close book)
- Review of open book and closed book exams
- Test taking tips
- Discussion on planning and preparation for the actual exam
- Feedback
- Concluding Session

5. OUR METHODOLOGY:

- Make coaching and monitoring innovative and using modern
- Media training also using on the go training by using interactive means and focusing on
- The exercises, practical applications and real situations study.
- Live delivery method, instructor-led training.
- Experienced consultant, trainers, and professional.
- Qualified trainer with high-level experience

6. ATTENDANCE REPORTS:

- Send daily attendance reports to trainingdep

- Send full attendance report to training dep. by the end of thecourse
- Attend 100 % from the course days also providedaily
- Issue attendance certificate for participant who attend minimum 80% from the course duration

7. PRE/POST REPORTS:

- Pre- assessment before starting training.
- Post assessment after finish training
- Full report for the deferent between Pre-& Post assessment

8. WHO SHOULD ATTEND?

- This course is tailored for Engineers, Supervisors, Managers and personnel who are interested in the API 570 program, or who are responsible for inspection, maintenance, repair and alteration of piping systems, and who wish to present themselves for the Piping Inspector Certification Examination